

WHAT IS CLAIMED IS:

1. A comparator circuit, comprising:

a differential amplifier including load resistors, for amplifying difference between two input voltages of the comparator circuit;

an emitter follower circuit for applying positive feedback with respect to the differential amplifier, and outputting an output voltage of the comparator circuit;

a grounded-base amplifier having transistors which each includes a base supplied with a reference voltage,

the load resistors respectively flowing currents which are obtained through the transistors as output currents of the comparator circuit.

2. The comparator circuit as set forth in claim 1, wherein:

the load resistors are respectively connected to each emitter of the transistors, and

the load resistors respectively flow currents which are obtained through each collector of the transistors as output currents of the comparator circuit.

3. A comparator circuit, comprising:

first and second transistors whose emitters are both

connected to a first constant current source and whose collectors are connected to one terminal of a first resistor and one terminal of a second resistor, respectively, so as to constitute a differential amplifier;

third and fourth transistors for constituting a grounded-base amplifier, the third and fourth transistors having emitters connected to another terminal of the first resistor and another terminal of the second resistor, respectively, the third and fourth transistors each including a base connected to a reference voltage source so that currents flowing in the first and second resistors are obtained through each collector of the third and fourth transistors as first and second output currents of the comparator circuit;

fifth and sixth transistors which operate as a follower circuit for outputting first and second output voltages by using outputs of the differential amplifier;

second and third constant current sources for supplying a constant current to each of the fifth and sixth transistors, respectively;

third and fourth resistors connected in series between a first input terminal and a first voltage output terminal, the third and fourth resistors having a junction therebetween, which is connected to a base of the first transistor; and

fifth and sixth resistors connected in series between a second input terminal and a second voltage output terminal, the fifth and sixth resistors having a junction therebetween, which is connected to a base of the second transistor.